



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

Division of Drinking Water

March 8, 2017

System No.: 2400220

Mr. Sean Kelley
Stevinson Ranch Maintenance Shop/The Grove
P.O. Box 818
Newman, CA 95360

RE: CITATION NO. 03-11-17C-008, Source Flow Meter

Enclosed is a Citation issued to the Stevenson Ranch Maintenance Shop/The Grove (hereinafter "Water System") public water system.

The Water System will be billed at the State Water Resources Control Board's (hereinafter "State Board") hourly rate (currently estimated at \$161.00) for the time spent on issuing this Citation. California Health and Safety Code, Section 116577, provides that a public water system must reimburse the State Board for actual costs incurred by the State Board for specified enforcement actions, including but not limited to, preparing, issuing and monitoring compliance with a citation. At this time, the State Board has spent approximately 2.0 hour(s) on enforcement activities associated with this violation.

The Water System will receive a bill sent from the State Board in August of the next fiscal year. This bill will contain fees for any enforcement time spent on the District for the current fiscal year.

If you have any questions regarding this matter, please contact Austin Ferreria at 559-447-3300 or me at 559-447-3316.

Sincerely,

Kassy D. Chauhan, P.E.
Senior Sanitary Engineer, Merced District
Central California Section
SOUTHERN CALIFORNIA BRANCH
DRINKING WATER FIELD OPERATIONS

Enclosures

Certified Mail No.: 7016 1370 0000 0455 3307

cc: Mr. Tom Galindo, Contract Operator
Merced County Environmental Health Department

**STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
DIVISION OF DRINKING WATER**

**IN RE: STEVINSON RANCH MAINTENANCE SHOP/THE GROVE
WATER SYSTEM NO. 2400220**

TO: Mr. Sean Kelley
P.O. Box 818
Newman, CA 95360

CC: Mr. Tom Galindo, Contract Operator
Merced County Environmental Health Department

**CITATION FOR VIOLATION OF
CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 64561
Source Flow Meters**

Issued on March 8, 2017

Section 116650 of the California Health and Safety Code authorizes the issuance of a citation to a public water system for violation of the California Safe Drinking Water Act (Health and Safety Code, Division 104, Part 12, Chapter 4, commencing with Section 116270) (hereinafter "California SDWA"), or any regulation, standard, permit or order issued or adopted thereunder.

The State Water Resources Control Board (hereinafter "Board"), acting by and through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for the Division (hereinafter "Deputy Director"), hereby issues a citation to the Stevinson Ranch Maintenance Shop/The Grove Water System (hereinafter "Water System") (2700 N. Van Cleif Road, Stevinson, CA 95374) for violation of California Code of Regulations (CCR), Title 22, Section 64561.

1

2 **APPLICABLE AUTHORITIES**

3 The applicable statutes and regulations are provided in Appendix A, attached hereto and
4 incorporated by reference.

5

6 **STATEMENT OF FACTS**

7 The Water System is a transient-noncommunity water system serving a population of
8 approximately 40 people per day through a single service connection. Effective April 1, 2014,
9 the Merced County Department of Environmental Health transferred the jurisdictional regulatory
10 oversight for this water system to the Division. The Water System currently operates under a
11 water supply permit (No. 03-11-16P-004) issued by the Division on January 13, 2016 (Appendix
12 B).

13

14 The Division conducted a sanitary survey of the Water System on June 8, 2015, and observed
15 that a flow meter was not installed on the discharge piping from Well No. 1. The Division noted
16 the need to install a totalizing flow meter at a point between the source and the entry point to the
17 distribution system and submit photo documentation to the Division by March 31, 2016. In
18 addition, the System was required to begin recording monthly well production quantities on at
19 least a monthly basis and reporting those quantities to the Division annually via the electronic
20 Annual Report to the Drinking Water Program (e-ARDWP). Despite the Division's efforts to
21 inform the Water System of the requirements to install a flow meter and record the total monthly
22 water production, the Water System has failed to install the flow meter and begin reporting the
23 monthly production from Well No. 1 annually to the Division.

24

25 **DETERMINATION**

26 Title 22, CCR, Section 64561, Source Flow Meters provides that each water system shall install
27 a flow meter at a location between each water source and the entry point to the distribution

1 system and meter the quantity of water flow from each source, and record the total monthly
2 production each month.

3
4 The Division has determined that the Water System failed to comply with Title 22, CCR, Section
5 64561, Source Flow Meters by failing to install a flow meter at Well No. 1 and for failure to meter
6 the quantity of water flow from each source and record the total monthly production each month.

7 8 9 **ADMINISTRATIVE PENALTIES**

10 11 **Pursuant to CHSC Section 116650**

12 Sections 116650(a) of the CHSC allows for the issuance of a citation for failure to comply with
13 the requirements of the California Safe Drinking Water Act, or any regulation, permit, standard,
14 citation, or order issued thereunder. Section 116650(d) and (e) allow for the assessment of a
15 penalty not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurs.
16

17 Despite the Division's efforts to work with the Water System, the Water System has failed to
18 comply with Section 64561. Therefore, the Division hereby assesses an administrative penalty
19 of one thousand and five hundred dollars (\$1,500) upon Water System. Directive No. 5 below
20 describes the requirements for payment of the Penalty and conditions under which the Division
21 may waive the requirement to pay the penalty.
22

23 **DIRECTIVES**

24 The Water System is hereby directed to take the following actions:

- 25
26 1. On or before March 31, 2017, submit a written response to the Division indicating its
27 willingness to comply with the directives of this citation.

2. On or before May 31, 2017, install a source flow meter on Well No. 1 at a point between the source and the entry point to the distribution system per Section 64561.
 3. On or before May 31, 2017, submit photo documentation to the Division showing the installation of the flow meter on Well No. 1 at a point between the source and the entry point to the distribution system in accordance with Section 64561.
 4. Beginning in June 2017 or before, record the total production from each active source a minimum of monthly and report the total monthly production to the Division annually via the Electronic Annual Report.
 5. Pay the Penalty of one thousand and five hundred dollars (\$1,500) within 90 days of the receipt of this Citation. Payment shall be made payable to the State Water Resources Control Board – Division of Drinking Water. Further instruction on the payment is provided in Appendix C, Notice of Citation Issuance.
- If the Water System complies with Directives 1, 2, 3, and 4 before the Penalty becomes due, and upon written request from the Water System, the Division will *consider, at its sole discretion*, terminating the requirement to pay the penalty.
6. If the Water System is unable to perform the tasks specified in this citation for any reason, whether within or beyond its control, and if the Water System notifies the Division in writing no less than five days in advance of the due date, the Division may extend the time for performance if the Water System demonstrates that it has used its best efforts to comply with the schedule and other requirements of this citation.

1 The Division reserves the right to make such modifications to the Citation as it may deem
2 necessary to protect public health and safety. Such modifications may be issued as
3 amendments to this Citation and shall be effective upon issuance.

4
5 Nothing in this Citation relieves the Water System of its obligation to meet the requirements of
6 the California Safe Drinking Water Act or any regulation, standard, permit or order issued
7 thereunder.

8
9 All submittal required by this Citation shall be submitted to the Division at the following address:

10
11 Kassy D. Chauhan, P.E.
12 Senior Sanitary Engineer
13 State Water Resources Control Board
14 Division of Drinking Water
265 W. Bullard Avenue, Suite 101
Fresno, CA 93704

15 **PARTIES BOUND**

16 This Citation shall apply to and be binding upon the Stevinson Ranch Maintenance Shop/The
17 Grove Water System, its officers, directors, agents, employees, contractors, successors, and
18 assignees.

19 **SEVERABILITY**

20 The Directives of this Citation are severable, and the Water System shall comply with each and
21 every provision thereof notwithstanding the effectiveness of any provision.

22
23 **FURTHER ENFORCEMENT ACTION**

24 The California SDWA authorizes the Board to: issue citation with assessment of administrative
25 penalties to a public water system for violation or continued violation of the requirements of the
26 California SDWA or any permit, regulation or order issued or adopted thereunder including, but
27 not limited to, failure to correct a violation identified in a citation or compliance order. The

1 California SDWA also authorizes the Board to take action to suspend or revoke a permit that has
2 been issued to a public water system if the system has violated applicable law or regulations or
3 has failed to comply with an order of the Board; and to petition the superior court to take various
4 enforcement measures against a public water system that has failed to comply with an order of
5 the Board. The Board does not waive any further enforcement action by issuance of this citation.

6
7
8 3-8-2017
Date


Carl L. Carlucci, P.E.
Supervising Senior Sanitary Engineer,
Central California Region
DRINKING WATER FIELD OPERATIONS BRANCH

11 **CERTIFIED NO.: 7016 1370 0000 0455 3307**

13 **CLC/KDC/Citation/no flow meter**

14 **Appendices:**

15 Appendix A: Applicable Authorities
16 Appendix B: Water Supply Permit No. 03-11-16P-004
Appendix C: Notice of Citation Issuance



APPENDIX A

Applicable Statues and Regulations for Citation No. 03-12-17C-XXX

Section 116650 of the CHSC states in relevant part:

§116650. Citations

- (a) If the Division determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the Division may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.
- (b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.
- (c) A citation may specify a date for elimination or correction of the condition constituting the violation.
- (d) A citation may include the assessment of a penalty as specified in subdivision (e).
- (e) The Division may assess a penalty in an amount not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation.

Section 64561 of Title 22, California Code of Regulations states in relevant part:

§64561. Source Flow Meters.

Each water system shall:

- (a) Except for inactive sources, install a flow meter at a location between each water source and the entry point to the distribution system;
- (b) Meter the quantity of water flow from each source, and record the total monthly production each month.

State Water Resources Control Board

Division of Drinking Water

January 13, 2016

System No.: 2400220

Mr. Sean Kelley
James J. Stevinson Corporation
P.O. Box 818
Newman, CA 95360

Dear Mr. Kelley,

RE: Water Supply Permit – No. 03-11-16P-004

The purpose of this letter is to inform you that the State Water Resources Control Board Division of Drinking Water (Division) has issued a domestic water supply permit for the Stevinson Ranch Maintenance Yard/The Grove Water System (System). The Domestic Water Supply Permit, Water Quality Monitoring Schedule, Engineering Report and other documents are attached to this letter. Please review the engineering report and provide any comments or corrections to the Division in writing.

In addition to the permit provisions included in the permit, the following items must be addressed by the System:

1. The System must install a flow meter equipped with a totalizer on Well No. 1 as required in the California Waterworks Standards. The System must submit receipts and/or photos as proof of flow meter installation by March 31, 2016. Beginning in April 2016, the System must begin recording the total production from the well at least one time per month and report the monthly production totals to the Division each year on the electronic annual report to the Drinking Water Program (e-AR).
2. At the time of the inspection, the casing vent was loose and could easily be removed. In addition, the casing vent was missing the screen. The System must ensure that the casing vent is secured and that it is properly screened to minimize the risk of contamination resulting from the casing vent. The System must submit photo documentation as proof of the repair to the Division by January 31, 2016.
3. An Emergency Chlorination Plan must be developed and submitted to the Division. Details of what is to be included in the plan can be found in the guidance document attached to this report. The System should use the attached guide to create an Emergency Chlorination Plan and submit it to the Division by February 29, 2016, (Attachment B) for review and approval.
4. The System must complete a cross-connection control survey to identify potential cross-connections in the distribution system and ensure that proper backflow prevention devices are provided. A copy of the Division's Cross-Connection Control Survey Form for Noncommunity

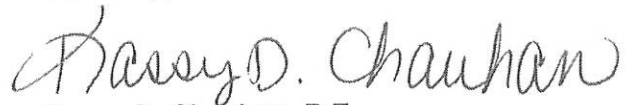
Water Systems is enclosed (Attachment F). The cross-connection control survey must be completed by March 31, 2016, and results provided to the Division.

5. The Water System does not have an Emergency Notification Plan (ENP) on file with the Division. The System must complete the ENP (Attachment D) by January 31, 2016, and return it to the Division.
6. If the attached BSSP (Attachment C) is acceptable to the water system, the System should sign and return the original document to the Division by January 31, 2016.

Please acknowledge in writing by January 31, 2016, receipt of this water supply permit, your willingness to comply with the permit provisions and any comments or corrections to the technical report. This permit contains an all-inclusive list of applicable special permit provisions.

The assistance provided by you during the inspection is greatly appreciated. If you have any questions regarding the permit provisions or the list of action items above, please contact me at 559-447-3316 or Lourdes Mertens at 559-447-3139.

Sincerely,



Kassy D. Chauhan, P.E.
Senior Sanitary Engineer
Merced District
Central California Section
SOUTHERN CALIFORNIA BRANCH
DRINKING WATER FIELD OPERATIONS

Enclosures

Cc: Merced County Environmental Health Division

State Water Resources Control Board
Division of Drinking Water

Certificate of Issuance

OF A

WATER SUPPLY PERMIT

TO

James J. Stevinson Corporation
For the Operation Of The
Stevinson Ranch Maintenance Yard/The Grove Water System

This is to certify that a water supply permit 03-11-16P-004 has been issued to James J. Stevinson Corporation on January 13, 2016, to supply water for domestic purposes to the Stevinson Ranch Maintenance Yard/The Grove Water System. The permit was issued by the State Water Resources Control Board - Division of Drinking Water, pursuant to the provisions of Division 104, Part 12, Chapter 4, Article 7, of the California Health and Safety Code. The permit is subject to the requirements of Title 22, California Code of Regulations, and to the conditions provided in the water supply permit.



A copy of the water supply permit is on file with the Stevinson Ranch Maintenance Yard/The Grove Water System or may be obtained by contacting the Merced District Office of the State Water Resources Control Board - Division of Drinking Water, Field Operations Branch, 265 W. Bullard Ave., Ste. 101, Fresno, CA 93704

Kassy D. Chauhan

Kassy D. Chauhan, P.E., Senior Sanitary Engineer

State Water Resources Control Board
Division of Drinking Water

STATE OF CALIFORNIA

**DOMESTIC WATER SUPPLY PERMIT ISSUED TO
James J. Stevinson Corporation
For the Operation Of The
Stevinson Ranch Maintenance Yard/The Grove Water System
Water System No. 2400220**

PERMIT NO. 03-11-16P-004

EFFECTIVE DATE: *January 13, 2016*

WHEREAS:

1. The Stevinson Ranch Maintenance Yard/The Grove Water System (System) was operated under the regulatory jurisdiction of the Merced County Environmental Health Department. The change in regulatory jurisdiction beginning April 1, 2014, and the change in ownership that was effective July 1, 2015, required a new domestic water supply permit be issued to the Stevinson Ranch Maintenance Yard/The Grove Water System.
2. The public water system is known as the Stevinson Ranch Maintenance Yard/The Grove Water System whose headquarters is at P.O. Box 818, Newman, CA 95360. The Water System facilities are located at 2700 North Van Clief Road, Stevinson, CA 95374.
3. The public water system for which a new domestic water supply permit is being issued is described briefly below:

The System serves two buildings that consist of a restaurant and a maintenance yard. In July 2015, the Stevinson Ranch Golf Club was closed down but the restaurant and the maintenance yard remained open under the new ownership. Future plans for the water system includes converting all of the land that was used for the golf course to almond orchards. The System is located on North Van Clief Road in Stevinson, CA, Merced County. The system is classified as a transient-noncommunity (TNC) water system. The System is served by one well that is equipped with a 500-gallon steel pressure tank to provide system pressure. The System has a septic system which is located greater than 100 feet from the well.

And WHEREAS:

1. The Stevenson Ranch Maintenance Yard/The Grove Water System has submitted all of the required information relating to the operation of the water system.
2. The State Water Resources Control Board, Division of Drinking Water has evaluated all of the information submitted by the Stevenson Ranch Maintenance Yard/The Grove Water System and has conducted a physical investigation of the water system.
3. The State Water Resources Control Board, Division of Drinking Water has the authority to issue domestic water supply permits pursuant to Health and Safety Code Section 116540.

THEREFORE:

1. The Stevenson Ranch Maintenance Yard/The Grove Water System meets the criteria for and is hereby classified as a transient-noncommunity water system.
2. The applicant has demonstrated that the Stevenson Ranch Maintenance Yard/The Grove Water System has adequate technical, managerial, and financial capacity to operate the water system.
3. Provided the following conditions are complied with, the Stevenson Ranch Maintenance Yard/The Grove Water System should be capable of providing water to consumers that is pure, wholesome, and potable and in compliance with statutory and regulatory drinking water requirements at all times.

THE SYSTEM OWNER, JAMES J. STEVINSON CORPORATION, IS HEREBY ISSUED THIS DOMESTIC WATER SUPPLY PERMIT TO OPERATE THE STEVINSON RANCH MAINTENANCE YARD/THE GROVE WATER SYSTEM.

The Stevenson Ranch Maintenance Yard/The Grove Water System shall comply with the following permit conditions:

1. The permitted active source for the Stevenson Ranch Maintenance Yard/The Grove Water System is Well No. 1 (PS Code 2400220-001). The Merced District Office of the Drinking Water Field Operations Branch (DWFOB) must permit all other sources before they can be used in the water system.
2. The Stevenson Ranch Maintenance Yard/The Grove Water System must comply with the attached water quality monitoring schedule for Well No. 1. All water quality monitoring results obtained in a calendar month must be submitted to the Division via electronic data transfer (EDT) by the tenth day of the following month.
3. The Stevenson Ranch Maintenance Yard/The Grove Water System shall submit plans and specifications for all proposed sources of supply and/or water treatment projects to the Division for review and approval prior to construction.
4. The Stevenson Ranch Maintenance Yard/The Grove Water System must submit an annual report to the Drinking Water Program each year, documenting specific system information for the prior year. The report shall be in the format specified by the Division and be submitted by the deadline specified by the Division.

This permit supersedes all previous domestic water supply permits issued for this public water system and shall remain in effect unless and until it is amended, revised, reissued, or declared to be null and void by the State Water Resources Control Board, Division of Drinking Water. This permit is non-transferable. Should the Stevenson Ranch Maintenance Yard/The Grove Water System undergo a change of ownership, the new owner must apply for and receive a new domestic water supply permit.

Any change in the source of water for the water system, any modification of the method of treatment as described in the Permit Report, or any addition of distribution system storage reservoirs shall not be made unless an application for such change is submitted to the State Water Resources Control Board, Division of Drinking Water.

This permit shall be effective as of the date shown below.

FOR THE STATE WATER RESOURCES CONTROL BOARD, DIVISION OF DRINKING
WATER

1-13-16

Kassy D. Chauhan

Kassy D. Chauhan, P.E.
Senior Sanitary Engineer
Merced District
Central California Section
SOUTHERN CALIFORNIA BRANCH
DRINKING WATER FIELD OPERATIONS

**Engineering Report
For the Consideration of a Revised Permit for
James J. Stevinson Corporation
For the Operation Of The
Stevinson Ranch Maintenance Yard/The Grove
System No. 2400220
Merced County
January 2016
State Water Resources Control Board
Southern California Branch
Drinking Water Field Operations
Kassy D. Chauhan, P.E - Senior Sanitary Engineer**

I. INTRODUCTION

1.1 PURPOSE OF REPORT

The Stevinson Ranch Maintenance Yard/The Gove Water System (System) is now under the regulatory jurisdiction of the State Water Resources Control Board—Division of Drinking Water (Division). Formerly, the system was under the local primacy agency of Merced County (County), until April 1, 2014, when regulatory jurisdiction of the County's small water system program was transferred to the Division. The System recently changed owners and as such changed names. The System was formerly known as the Stevinson Ranch Golf Club. The purpose of this report is to describe the current state of the water system and to make recommendations regarding the issuance of a permit.

1.2 DESCRIPTION OF SYSTEM

The System serves two buildings that consist of a restaurant and a maintenance yard. In July 2015, the Stevinson Ranch Golf Club was closed down but the restaurant and the maintenance yard remained open under the new ownership. Future plans for the water system includes converting all of the land that was used for the golf course to almond orchards. The System is located on North Van Clief Road in Stevinson, CA, Merced County. The system is classified as a transient-noncommunity (TNC) water system. The System is served by one well that is equipped with a 500-gallon steel pressure tank to provide system pressure. The System has a septic system which is located greater than 100 feet from the well.

1.3 SOURCES OF INFORMATION

Information for the preparation of this report was obtained from Sean Kelley, Administrative Contact for James J. Stevenson Corporation; Tom Galindo, contract operator with Westside Water; system files from the Merced County Environmental Health Department; and a field inspection of the water system conducted on June 8, 2015, by Kassy Chauhan.

II. INVESTIGATION FINDINGS

2.1 AREA SERVED

The mailing address for the water system is P.O. Box 818, Newman, CA 95360. The system is located on North Van Clief Road in Stevenson, CA. The System serves an average daily population of 25 people year around.

2.2 GROUNDWATER SOURCE OF SUPPLY

Well No. 1 – NW of Drive Range - (Active Untreated)

Well No. 1 (PS Code 2400220-001) is located northeast of the Maintenance Shop off of East Side Creek Drive. The well was drilled in May 2002 via the rotary drilling method to a depth of 115 feet. The well was constructed with an 8-inch diameter PVC casing that extends to a depth of 115 and is perforated between 95 and 115 feet. The well was constructed with a bentonite annular seal to a depth of 75 feet and gravel packed from 75 to 115 feet. The well is surrounded by a 5-foot by 8-foot concrete slab that is flush with the surrounding ground. The wellhead features a raw water sample tap and a casing vent. At the time of the inspection, the casing vent was loose and could easily be removed. In addition, the casing vent was missing the screen. The well is equipped with a 5-hp submersible pump. The well discharges directly to the 500-gallon steel pressure tank that provides system pressure. The Well Completion Report is on file with the Division.

The System must ensure that the casing vent is secured and that it is properly screened to minimize the risk of contamination resulting from the casing vent. The System must submit photo documentation as proof of the repair to the Division by January 31, 2016.

The discharge piping from the well is 3 inches in diameter and extends to the steel pressure tank. The discharge piping includes an air relief valve, a check valve and a sample tap prior to entering the pressure tank. At the time of the inspection, the air relief vent was properly inverted and screened. The discharge piping is not equipped with a flow meter. All water supply wells must have a flow meter installed at a location

between the wellhead and the entrance to the distribution system in accordance with the California Waterworks Standards. As mentioned above, at the time of the inspection, there was no flow meter installed on the discharge line from the well.

The System must install a flow meter equipped with a totalizer at a location between the wellhead and the entry point to the distribution system as required in the California Waterworks Standards. The system must submit receipts and/or photos as proof of flow meter installation by March 31, 2016. Beginning in April 2016, the System must begin recording the total production from the well at least one time per month and report the monthly production totals to the Division each year on the electronic annual report to the Drinking Water Program (e-AR).

Old Well:

According to the files from the Merced County Environmental Health Department, the System drilled the new well (Well No. 1 described above) approximately 20 feet from the old well. The old well was properly destroyed in June 2002 due to nitrate contamination. A Well Destruction Log is on file with the Division.

2.3 ADEQUACY OF SUPPLY

No production data is available since there is no flow meter present in the system. According to the system owner, no water outages have occurred. As mentioned in Section 2.2 above, the System must install a flow meter and read the production data monthly beginning April 2016. The System must report the production data annually to the Division through the Electronic Annual Reports.

2.4 TREATMENT

The System does not provide routine treatment of the water produced by Well No. 1. Because the System does not continuously disinfect the water produced by the well, the System is required to have an Emergency Chlorination Plan on file with the Division. The Emergency Chlorination Plan identifies how the System would adequately disinfect the source and the distribution system if there was a bacteriological contamination event. A review of the System's file showed that there was no Emergency Chlorination Plan on file.

An Emergency Chlorination Plan must be developed and submitted to the Division. Details of what is to be included in the plan can be found in the guidance document attached to this report. The System should use the attached guide to create an Emergency Chlorination Plan and submit it to the Division by February 29, 2016, (Attachment B) for review and approval.

2.5 STORAGE AND DISTRIBUTION SYSTEM

No storage is provided for the water system. System pressure is provided through a 500-gallon steel pressure tank located adjacent to the wellhead. The pressure tank is equipped with a pressure gauge. It is reported that the distribution system is pressurized to at least 40 psi at all locations. At the time of the inspection, the pressure tank did not have an air compressor installed to ensure that the tank remains pressurized. The Division recommends that an air compressor be installed on the steel pressure tank to ensure that the tank remains pressurized at all times. Ensuring that the steel pressure tank is functioning properly will prevent the well pump from cycling on and off which could lead to premature pump failure.

The distribution system consists of 1-inch diameter PVC lines. System pressure is maintained between 40 and 60 psi according to records from the County of Merced. All landscape irrigation water is provided by a separate irrigation well and irrigation distribution system.

2.6 OPERATION AND MAINTENANCE

The System is owned by the James J. Stevenson Corporation. Mr. Sean Kelley is the designated Administrative Contact for the System. Routine maintenance and all record keeping practices are coordinated by Mr. Kelley. The Water System is not required at this point to acquire any level of operator certification since no treatment is provided and the system is classified as a transient-noncommunity water system. At the time of the inspection and the writing of this report, the System continued to receive contract operation services from Westside Water. Westside Water visits the site a minimum of monthly and collects the required distribution system bacteriological samples.

2.6.1 Cross-Connection Control Program

The Water System is required to monitor for cross connections on a continual basis and ensure there are adequate backflow prevention devices at all possible contamination points. Backflow prevention devices are to be tested and certified by a licensed Backflow Prevention Device Tester on an annual basis. If applicable, submit copies of the results to the Division. A review of the records provided by the Merced County EHD and information reported on the 2014 Electronic Annual Report did not reveal that a cross-connection control survey has been completed of the system.

The System must complete a cross-connection control survey to identify potential cross-connections in the distribution system and ensure that proper backflow prevention

devices are provided. A copy of the Division's Cross-Connection Control Survey Form for Noncommunity Water Systems is enclosed (Attachment C). The cross-connection control survey must be completed by March 31, 2016, and results provided to the Division.

2.6.2 Complaints

Due to the small size of the water system, complaints are received directly by the System Owner. Once received, the owner diagnoses the complaint and takes whatever actions are necessary to resolve the issue. The Water System must continue to record each complaint received and report that information to the Division on the electronic Annual Report to the Drinking Water Program each year.

2.6.3 Emergency Notification Plan

The Water System does not have an Emergency Notification Plan (ENP) on file with the Division. The System must complete the ENP (Attachment D) by January 31, 2016, and return it to the Division. The ENP must list the contact information of three people that can be contacted in the event of an emergency at the water system. The ENP must also specify the method that will be used to notify customers in the event of an emergency. Given the small size of the water system, the standard method of notification will likely be used which includes posting all of the locations where potable water are provided with the appropriate notice. In addition, the System would notify Merced County Environmental Health Department in case of emergency because of the food facility. Water to the soda fountain would be shut off until the emergency water quality concern has been eliminated. If the standard method of notification will be used, the System should check the box on the ENP form that indicates such.

The system must update the Emergency Notification Plan any time system personnel changes occur.

2.6.4 Bacteriological Sample Siting Plan (BSSP)

The System has a Bacteriological Sample Siting Plan (BSSP) dated May 2005 on file for the System. Given the change in ownership of the system, the reclassification of the water system and the change in regulatory jurisdiction, an updated BSSP is required. During the inspection, a BSSP was created for the water system and identifies five routine distribution system monitoring locations to be used for conducting the required bacteriological monitoring along with the associated repeat sample locations. To comply with the California Groundwater Rule's triggered source monitoring, the System must ensure a source sample is collected any time there is a total coliform positive in the distribution system. One way to ensure this requirement is complied with is to identify the well (Well. No 1) as the third repeat site for each routine distribution system site as indicated on the enclosed BSSP (Attachment E). If the attached BSSP is acceptable to the water system, the System should sign and return the original

document to the Division. All bacteriological monitoring must be completed in accordance with the approved plan. The BSSP must be returned to the Division by January 31, 2016.

The System must ensure that five routine bacteriological samples are collected the month following a month that total coliform is found in a routine distribution system bacteriological sample. In addition, any time the system pressure drops below 5 psi, the System must provide a Boil Water Order (BWO – Tier 1 Public Notification) to all users of the Water System as well as notify the Division and the Merced County Environmental Health Department. The System must remain on the BWO until special investigative bacteriological samples show that the water in the distribution system is free from coliform bacteria. An example of a BWO – Tier 1 Public Notification is attached (Attachment F).

2.7 SOURCE WATER QUALITY MONITORING

2.7.1 Vulnerability Assessment for Sources

A source water assessment was conducted for the system by the Merced County EHD in March 2003. A source water assessment is an evaluation of a drinking water source that includes delineation of the boundaries of the source area, identification of Possible Contaminating Activities (PCAs) within the delineated area, a determination of the PCAs to which the source is most vulnerable, and a summary of the vulnerability of the source to contamination.

2.7.2 Water Quality and Monitoring

The source for this water system currently meets all primary drinking water standards for the system classification. The Water System must comply with the following ongoing water quality monitoring schedule. All water quality monitoring results obtained in a calendar month must be submitted to the Division by the tenth (10th) day of the following month.

<i>Constituent</i>	<i>Frequency</i>	<i>Date last sampled</i>	<i>Next due date</i>
Bacteriological – Distribution System	Minimum of once every three months	11/2015	February 2016
Nitrate	Once a year	3/2015	March 2016
Nitrite	Once every three years	6/2013	June 2016

All transient-noncommunity water systems are required to monitor for fluoride, iron, manganese, bicarbonate, carbonate, hydroxide alkalinity, calcium, magnesium, sodium,

hardness and pH at least one time. A review of the Division's database showed that the System has completed the one time monitoring that is mentioned above.

The contract operator, Westside Water, is currently contracted to collect and analyze one bacteriological sample monthly from Site 1B – Club House. As mentioned in the BSSP Section of the report, given the change in system classification, the distribution system bacteriological monitoring frequency is one sample per quarter. The routine site is identified as Site 1B – Club House. The last bacteriological sample was collected from the distribution system in December 2015. As such, the next sample must be collected from Site 1B – Club House in March 2016. Routine bacteriological monitoring will be completed in March, June, September and December of each month. All bacteriological monitoring must be performed in accordance with the approved BSSP.

A review of the bacteriological monitoring submitted since April 2014 indicates that the system has had two months (September and December 2014) with total coliform present in the distribution system. In September 2014, Site 1B had a total coliform detection of 1.1 MPN/100 mL. All repeat samples were absent for total coliform bacteria. In December 2014, Site 1B was positive for total coliform bacteria (2.2 MPN/100 mL. Two of the repeat samples including the repeat sample from the source were positive for total coliform bacteria. Given that in December 2014 more than one of the routine distribution system samples was positive for total coliform bacteria, the System failed the Total Coliform Rule and the Division issued a citation to the System. All bacteriological monitoring results submitted since the December 2014 TCR MCL failure have been absent for total coliform bacteria. To date, all bacteriological analyses have been completed by the Fresno County Environmental Health Laboratory.

It should be noted that Well No. 1 must be analyzed for E. coli bacteria if a routine distribution system sample is positive for total coliform bacteria, as required by the California Groundwater Rule. The System appropriately monitored Well No. 1 for E.coli bacteria in September and December 2014 due to the positive bacteriological monitoring results.

A copy of the water quality monitoring schedule for transient-noncommunity water systems is attached (Attachment G).

III. APPRAISAL OF SANITARY HAZARDS & PUBLIC HEALTH SAFEGUARDS

Overall, the Stevenson Ranch Maintenance Yard/The Grove Water System water supply facilities are in good sanitary condition and appear to be operating satisfactorily under competent supervision. An evaluation of the water quality results showed that the water produced by Well No. 1 complies with all applicable drinking water systems for transient-noncommunity water systems. The Water System appears to have adequate source capacity since there have not been any low pressure or water outages reported

to the Division. Starting in April 2016, the System will be able to monitor the total well production monthly.

IV. CONCLUSIONS AND RECOMMENDATIONS

The Stevenson Ranch Maintenance Yard/The Grove Water System is classified as a transient-noncommunity water system. It is recommended that a new domestic water supply permit be granted to the James J. Stevenson Corporation for the operation of the Stevenson Ranch Maintenance Yard/The Grove Water System subject to the following provisions:

1. The permitted active source for the Stevenson Ranch Maintenance Yard/The Grove Water System is Well No. 1 (PS Code 2400220-001). The Merced District Office of the Drinking Water Field Operations Branch (DWFOB) must permit all other sources before they can be used in the water system.
2. The Stevenson Ranch Maintenance Yard/The Grove Water System must comply with the attached water quality monitoring schedule for Well No. 1. All water quality monitoring results obtained in a calendar month must be submitted to the Division via electronic data transfer (EDT) by the tenth day of the following month.
3. The Stevenson Ranch Maintenance Yard/The Grove Water System shall submit plans and specifications for all proposed sources of supply and/or water treatment projects to the Division for review and approval prior to construction.
4. The Stevenson Ranch Maintenance Yard/The Grove Water System must submit an annual report to the Drinking Water Program each year, documenting specific system information for the prior year. The report shall be in the format specified by the Division and be submitted by the deadline specified by the Division.

Report Prepared By: Kassy D. Chauhan, P.E.
Senior Sanitary Engineer

Attachment A: Photos – June 8, 2015
Attachment B: Emergency Chlorination Plan Guidelines
Attachment C: Cross-Connection Control Survey Guidance
Attachment D: Emergency Notification Plan
Attachment E: Bacteriological Sample Siting Plan
Attachment F: Boil Water Order – Tier 1 Public Notification Template
Attachment G: Water Quality Monitoring Schedule

ATTACHMENT A:

Inspection Photos – September 3, 2015

Inspection Photos
Stevinson Ranch Maintenance Yard/The Grove Water System
System No. 2400220
June 8, 2015



Picture No. 1: The sole source of supply for the Stevinson Ranch Maintenance Yard/The Grove Water System is a well that is located northeast of the maintenance yard. The well is equipped with a 5-hp submersible pump. The casing vent is loose and needs to have a screen installed. In addition, the System must install a flow meter between the wellhead and the entrance to the pressure tank. The System should keep the area around the well free from debris and overgrown vegetation.

ATTACHMENT B:

Emergency Chlorination Plan Guidelines

State Water Resources Control Board
Division of Drinking Water

State Water Resources and Control Board
July 2014

EMERGENCY DISINFECTION PLAN REQUIREMENTS

An emergency disinfection plan, designed to outline procedures in the event of bacteriological contamination, shall be developed and a copy submitted to our office. The plan shall outline specific response procedures for disinfection of wells, pressure tanks, storage tanks and installation of emergency chlorination equipment. Guidance on the operation of the emergency disinfection equipment, to be included in the Emergency Disinfection Plan, is included in the attached document (Emergency Disinfection Plan Guidance).

The plan shall state that the necessary equipment is on-site or readily available and the means by which to connect and activate it have been provided. Those items needed to accommodate emergency chlorination equipment include:

- An all weather, 110 volt electrical receptacle, energized by the well pump operation.
- A three-quarter (3/4) inch threaded tap on the piping downstream of the well check valves for use as a chlorine injection point.
- A sample tap (non-threaded) at least three to six feet downstream of the chlorine injection point.

The plan should further state that qualified personnel (specify who) are under contract to carry out the plan and install, adjust and operate the equipment as necessary. The plan should also include the treatment or distribution operator certification grade and emergency telephone numbers of water system staff and certified operator(s).

Attachment: Emergency Disinfection Plan Guidance

Emergency Disinfection Plan Guidance for Public Water Systems

The purpose of this Emergency Disinfection Plan (EDP) is to assist utilities implement emergency chlorination. The guidance provided below is designed to facilitate the installation of emergency chlorination equipment and to assist in the setting of chemical dosage in order to maintain acceptable free chlorine residual needed to insure public health protection immediately after a disaster. Items which should be obtained prior to the onset of a disaster include the following equipment:

1. Emergency chlorination units.
2. Chlorine residual test kits (preferably DPD)
3. Granular Calcium Hypochlorite, 65% available chlorine, (liquid sodium hypochlorite has a relatively short shelf life so it is advisable that it not be purchased in advance). Chemicals used for emergency chlorination must be approved under ANSI/NSF¹ Standard 60 (direct additives).

Installation Procedures

A utility should not wait until an emergency has occurred before it attempts to install its emergency chlorination equipment. It is advisable that all field maintenance staff be familiar with the installation procedures in order to quickly install the emergency chlorination equipment. The remainder of this plan addresses the use of hypochlorinators in the event of an emergency. For those utilities which use gas chlorination units, they should already be familiar with their operation if they are using this type of equipment.

The chlorination equipment purchased by the utility must be adequately sized for the proposed installation. The feed capacity of the hypochlorinator should allow the utility to do at a minimum of 5 parts per million free chlorine residual. After the emergency chlorination units have been physically connected to the wells and/or other sources in question, refer to the attached table or use the following procedures to calculate the appropriate settings. If you are unable to perform these calculations, contact a staff of the Drinking Water Program immediately.

The attached tables may be used to mix a solution of a known strength. Decide on a solution strength that you wish to use and find the amount of chlorine needed for a 100 gallon barrel from Table 1.

Table 2 can be used to determine the volume of solution to be added for different flow rates for each mg/L of chlorine dosage. It should be recognized that large capacity wells will need stronger solution strengths or the feed barrel will need to be filled too frequently. The volumes in table 2 are in gallons per day (gpd). If the feed pump capacity is given in gallons per hour, then the volume from Table 2 must be divided by 24 to give a gph value.

To determine the appropriate pump setting, the value from Table 2 must be divided by the feed pump capacity.

Example:

Feed Pump Capacity = 10 gph; Q = 1500 gpm; 7% solution; 5 mg/L dosage

From table 2 → Chlorine Volume = 30.9 gpd for each mg/L.

For 5 mg/L → $5 \times (30.9) = 154.5$ gpd

Since feed pump has a maximum capacity of 10 gph, the appropriate length of stroke setting is:

$$\frac{154.5 \times 24}{10 \text{ gph}} = 0.64$$

Outlined below are the equations to use if the Tables are not used:

1. A solution barrel of a known volume must be obtained. The barrel should be filled with a known volume of water. To this volume, a known weight of chemical should be added. The solution strength must be determined using the equation given below:

$$\% \text{ solution} = \frac{\text{Weight of chemical added to solution barrel (lbs)}}{\text{Weight of water in solution barrel (lbs)}} \times 100$$

(1 gallon of water weighs 8.34 lbs)

A 6% solution can be obtained by adding one half pound of chemical per gallon of water using a 100 gallon barrel. (see below):

$$50 / (100 \times 8.34 \text{ lb/gal of water}) \times 100 = 5.99 \text{ or } 6\%$$



used to get percentage

To calculate the pounds per hour of chemical that must be added to obtain a known chlorine concentration, the following equation must be used:

Equation #1:

$$\text{lbs per hour of chemical} = 8.34 \times \text{desired dosage in ppm} \times \text{flow rate in gpm} \times 60 \text{ min}/1,000,000$$

Assuming the desired dosage is 5 ppm that gives the following equation:

Equation #2: lbs per hour of chemical = 2.5×10^{-3} x flow rate in gpm

Next you must determine the required gallons per hour of chemical to be added. This must be obtained using the following equation:

Equation #3:

gallons per hour of chemical = lbs per hour / 8.34 / solution strength / 100 (from above)

Once this value has been obtained, then the next step is to review the maximum feed rate in gallons per day of the chemical feed pump. This is generally printed in a label attached to the pump and it may specify the discharge pressure this maximum rate applies to. Most chemical feed pumps have either a length of stroke setting or two settings for frequency of stroke and length of stroke. To determine what settings should be used, a review of the instrumentation on the pump must be conducted.

If two control settings are provided, then set the frequency control at 100% and provide adjustment only to the length of stroke adjustment. The equation to be used to determine at what setting the length of stroke should be, is given below:

Percent length of stroke = gallons per hour (obtained above) x 24 x 100 / the pump capacity in gpd

This numerical setting should be used when adjusting the pump. If both pump settings are to be changed from 100%, then the percent stroke equation is as follows:

Percent length of stroke = gallons per hour x 24 x 100 / stroke frequency / pump capacity in gpd

A check on the actual dosage can be performed by using the total gallons of solution pumped within a known operating period. That information can be used as follows:

Actual Dosage = $\frac{\text{gallons of solution} \times \text{solution strength}}{\text{gallons of water treated in MG}}$

An easier way to use hypochlorination equipment is to have calibration or volumetric feed cylinders installed on the intake line to the pump. If these cylinders are available, then a known volume of solution can be pumped and the time it takes to pump that volume is used to determine gallons per hour at a known discharge pressure. The actual percent solution must still be known to conduct the other calculations.

Once a utility has implemented emergency chlorination of their system, it is important to conduct follow up distribution chlorine residual monitoring to determine the effectiveness of the chlorination process. In the event of an emergency, hypochlorination equipment should be used to dose the system at 2 ppm of free chlorine residual. Chlorine residual monitoring within the distribution system should take place to verify that an adequate residual is being obtained

at all locations within the distribution system. Any areas which have suppressed chlorine residuals should receive further investigation to determine whether or not there are other problems associated with the reduced residuals.

Flushing should be provided if possible, to draw the chlorinated water into the distribution system as soon as possible.

In addition to the chlorine residual monitoring, bacteriological sampling of the distribution system in all areas should be conducted. Chlorine residual monitoring in addition to bacteriological sampling should be used to further define areas of distribution system that need additional investigation. Chlorination of the system should continue until it has been verified that no structural problems exist within the distribution system and all bacteriological monitoring shows that there is no presence of pathogenic organisms.

TABLE 1
AMOUNT OF CHLORINE PER 100 GALLON BARREL*

	Solution Strength	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%
Type of Chlorine												
5% Sodium Hypochlorite**		60 gal	80 gal	100 gal								
12.5% Sodium Hypochlorite**		24 gal	32 gal	40 gal	48 gal	56 gal	64 gal	72 gal	80 gal	88 gal	96 gal	
65% Calcium Hypochlorite***		38 lbs	51 lbs	64 lbs	77 lbs	90 lbs	103 lbs	116 lbs	128 lbs	141 lbs	167 lbs	

* Add the quantity indicated to the 100 gallon barrel and then fill the remaining volume with water.

** The sodium hypochlorite must be ANSI/NSF¹ certified for potable drinking water and approved as direct additive (ANSI/NSF Standard 60).

1: American National Standard Institute (ANSI) or National Sanitation Foundation (NSF)

*** HTH, tablets or granular chlorine

Example: For 10% solution using 12.5% sodium hypochlorite, use 80 gallons of sodium hypochlorite and add 20 gallons of water.

Example: For 10% solution using 65% available Calcium Hypochlorite (CaHOCl), use 128 lbs of granular chlorine and add water to fill barrel and mix.

TABLE 2
CHLORINE VOLUME REQUIRED GALLONS PER DAY (GPD) PER MG/L OR PPM OF
DESIRED CHLORINE DOSAGE*

	Solution Strength	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%
Flow Rate												
50 gpm		2.4	1.8	1.4	1.2	1.03	0.9	0.8	0.7	0.7	0.6	0.6
75 gpm		3.6	2.7	2.0	1.8	1.5	1.4	1.2	1.0	1.0	0.9	0.8
100 gpm		4.8	3.6	2.9	2.4	2.0	1.8	1.6	1.4	1.3	1.2	1.1
300 gpm		14.4	10.8	8.6	7.2	6.2	5.4	4.8	4.3	3.9	3.6	3.3
500 gpm		24.0	18.0	14.4	12.0	10.3	9.0	8.0	7.2	6.6	6.0	5.5
800 gpm		38.4	28.8	23.0	19.2	16.5	14.4	12.8	11.5	10.5	9.6	8.9
1000 gpm		48.0	36.0	28.0	24.0	20.6	18.0	16.0	14.4	13.1	12.0	11.1
1500 gpm		72.0	54.0	43.2	36.0	30.9	27.0	24.0	21.6	19.6	18.0	16.6
2000 gpm		96.0	72.0	57.6	48.0	41.1	36.0	32.0	28.8	26.2	24.0	22.2

* Values in the Table are the flow rates in gallons of solution per day that be added for each mg/L of desired dosage.

Example: Well Discharge = 1,000 gpm
 Solution Strength = 5%
 Desired Dosage = 5 mg/L or 5 ppm

From Table 2, Need to add 28.8 gpd per mg/L (or ppm)
 Therefore, 5 mg/L x 28.8 gpd/(mg/L) = 144 gpd.

ATTACHMENT C:

Cross-Connection Control Survey Guidance

CROSS-CONNECTION CONTROL NON-COMMUNITY WATER SYSTEMS SWRCB-MERCED DISTRICT

Purpose of Cross-Connection Control Program

Water provided by a public water system may be contaminated via cross-connections within the user's distribution system. The purpose of the cross-connection control program is to eliminate actual cross-connections and to reduce the hazard of potential cross-connections. This is accomplished by identifying actual and potential cross-connections and either installing appropriate backflow prevention assemblies or ensuring that water-using equipment is installed in accordance with plumbing code requirements and good practice.

What are cross-connections?

Cross-connections are unprotected connections between a potable water system and any source or system containing unapproved water or a substance, which is not safe. Examples of cross-connections include:

1. Improperly installed irrigation systems (which may allow back siphoning of stagnant, bacterially contaminated water into the piping system) or premises where there are irrigation systems into which fertilizers, herbicides, or pesticides are or can be injected.
2. Improperly plumbed water-using devices such as hot tubs, boilers or commercial dishwashers.
3. Irrigation systems served by an auxiliary source, such as an unapproved well or a creek. Such systems, if connected to the drinking water system, create a potential for contamination via cross-connections.
4. Interconnections between the potable system and a non-potable system.

How to Comply

For Non-community water systems, the program consists of identification of hazards and protection of the system from these hazards. The program is to be adapted to the size and complexity of the system. The following are the required elements and necessary actions:

1. Identification of Hazards -This consists of a review of the system facilities to identify areas of potential contamination via cross-connections. A survey of the system is to be conducted with documentation of the findings. Any facilities that handle wastewater or hazardous liquids require special evaluation to ensure protection of the potable system from contamination.
2. Protection of System -Taking action to abate the potential cross-connection by ensuring compliance with plumbing codes, installing and maintaining appropriate backflow prevention assemblies and other means. This includes annual testing and repair or replacement as needed.

Completion and Documentation

Attached is additional information and forms that you can use to help guide you through this program. A survey of the system is to be conducted by a qualified person. Documentation of the survey findings is to be maintained and submitted to the Department when requested.

Attachments - Information and forms for surveys

- | |
|--|
| <p>Notes: 1. Regulatory Authority: Pursuant to Section 7584 of the California Code of Regulations, which states, "The water supplier shall protect the public water supply from contamination by implementation of a cross-connection control program".</p> <p>2. Applicability: Non-community water systems</p> |
|--|

ELEMENTS OF A CROSS-CONNECTION CONTROL PROGRAM CDPH Merced District

When implementing a Cross-Connection Control Program, the water supplier or health agency should follow an organized plan. The following items should be included as a minimum. The items **explain the Department of Health Services' policy regarding the regulations.**

7584. Responsibility and Scope of Program

The water supplier shall protect the public water supply from contamination by implementation of a cross-connection control program. The program, or any portion thereof, may be implemented directly by the water supplier or by means of a contract with the local health agency, or with another agency approved by the health agency. The water supplier's cross-connection control program shall for the purpose of addressing the requirements of Sections 7585 through 7605 include, but not limited to, the following elements:

(a) *The adoption of operating rules or ordinances to implement the cross-connection program.*

A public water supplier shall enact an ordinance or rule of service outlining the cross-connection control program and providing enforcement authority.

(b) *The conducting of surveys to identify places where cross-connections are likely to occur.*

Water utilities do not have any responsibility for controlling or abating cross-connections on a user's premises. All existing facilities where potential cross-connections are suspected, however, shall be listed and inspected or reinspected on a priority basis, where feasible. All applications for new services or for enlarging existing services or changing of occupant shall be reviewed or screened for cross-connections hazards. Surveys are intended to be conducted by a person certified by AWWA or ABPA as a cross-connection specialist. A list of persons that have this certification may be obtained by contacting AWWA at (909) 481-7200, ABPA at <http://www.abpa.org/>, or by contacting the CDPH-Fresno District office.

(c) *The provision of backflow protection at the user's connection or within the user's premises or both.*

Adequate provisions for implementation and enforcement of backflow protection where needed including the shutting off service when necessary

(d) *The provision of at least one person trained in cross-connection control to carry out the cross-connection program.*

Specific units of the health agency and/or water supplier should be designated to organize and carry out the cross-connection control program. The personnel in those units should be trained as to the causes and hazards of unprotected cross-connections.

(e) *The establishment of a procedure or system for testing backflow preventers.*

A list of approved backflow preventers and list of certified testers should be made available to each water user required to provide backflow protection.

The list may include backflow devices approved by University of Southern California, Foundation for Cross-Connection Control and IAPMO, which may be found on the CDPH website at the following address:

The List of certified testers may be lists developed by the American Water Works Association and local county health agencies.

Backflow preventers should be tested at least yearly or more often as required by the health agency or water supplier.

(f) The maintenance of records of locations, tests and repairs of backflow preventers

Adequate records should be kept and filed for reference. These records should include, in addition to the name of the owner of the premises, the:

- a) Date of inspection
- b) Results of inspection
- c) Required protection
- d) List of all backflow preventer devices in the system
- e) Test and maintenance reports
- f) All correspondence between the water supplier, the local health authority, and the consumer
- g) Records must be maintained for a minimum of three years

Records of inspection and testing should be evaluated to determine if:

- a) Devices are frequently or sufficiently reviewed to detect failure.
- b) There are unusual feature of a particular model of device or component.
- c) Cause of failure can be eliminated.

A program should be established to notify the water user when his backflow preventer must be tested. (A minimum of once each year is required.) After installation or repair, a backflow preventer should be tested and approved before it is accepted.

7605. Testing and Maintenance of Backflow Preventers

Regulations require the following regarding testing and maintenance of backflow prevention devices:

- (a) The water supplier shall assure that adequate maintenance and periodic testing are provided by the water user to ensure their proper operation.
- (b) Backflow preventers shall be tested by persons who have demonstrated their competency in testing of these devices to the water supplier or health agency.
- (c) Backflow preventers shall be tested at least annually or more frequently if determined to be necessary by the health agency or water supplier. When devices are found to be defective, they shall be repaired or replaced in accordance with the provisions of this Chapter.
- (d) Backflow preventers shall be tested immediately after they are installed, relocated or repaired and not placed in service unless they are functioning as required.
- (e) The water supplier shall notify the water user when testing of backflow preventers is needed. The notice shall contain the date when the test must be completed.
- (f) Reports of testing and maintenance shall be maintained by the water supplier for a minimum of three years.

GUIDELINES FOR CROSS-CONNECTION CONTROL FOR IRRIGATION SYSTEMS

Summary: Public water systems must be protected from actual and potential cross-connections between irrigation systems and domestic water systems. This is accomplished by ensuring that the irrigation system is installed in accordance with the requirements of the Uniform Plumbing Code with appropriate backflow prevention devices.

Special Conditions: For systems with an unapproved auxiliary source serving the irrigation system, additional protective action is necessary to guard against introduction of water from the auxiliary source into drinking water system. The following actions must be taken to guard against this hazard:

1. Identify all interties between the domestic system and the irrigation system.
2. Either disconnect these interties or install approved backflow prevention devices at each intertie. A Reduced Pressure Principle backflow prevention device is the type of device, which is to be installed.
3. Verify that there are no other interconnections between the domestic and irrigation systems. This is accomplished by draining the irrigation system and verifying that it does not refill with water from the domestic system through an undetected cross-connection. This procedure should be repeated on a period basis (once every three months).

Records: Maintain written records of dates of tests, procedures, results and corrective actions taken.

**CROSS-CONNECTION SURVEY SUMMARY FORM
NON-COMMUNITY WATER SYSTEMS**

System Name _____ Number _____

Date of Survey _____

Name of person performing survey _____

Qualifications of person performing survey _____

Description of Survey (Elements of survey, how conducted, hazards identified):

Actions taken (Include description of corrections, backflow prevention assemblies installed):

Long-term (Include description of who will ensure ongoing protection of the system from cross-connections and testing of backflow prevention assemblies):

Other (Include other elements of program):

Name of person completing this report _____ Date _____

Signature _____

ATTACHMENT D:

Emergency Notification Plan



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

Division of Drinking Water

System No.: _____

WATER QUALITY EMERGENCY NOTIFICATION PLAN

Name of Utility: _____

Physical Location Address: _____

The following persons have been designated to implement the plan upon notification by the Division of Drinking Water, SWRCB that an imminent danger to the health of the water users exists:

Water Utility: Contact Name & Title	Email Address	Day	Telephone		Cell
			Evening		
1. _____	_____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____	_____

The implementation of the plan will be carried out with the following DDW-SWRCB and County Health personnel:

DDW-SWRCB & County Health Departments:		Telephone	
Contact Name & Title		Day	Evening
1. Kassy D. Chauhan, P.E. – Merced District Engineer DDW-SWRCB		(559) 447-3300	(559) 385-5014 (cell)
2. Ron Rowe, Env. Health Director, Merced County Environmental Health		(209) 381-1100	

3. If the above personnel cannot be reached, contact:

Office of Emergency Services Warning Center (24 hrs) (800) 852-7550 or (916) 845-8911
When reporting a water quality emergency to the Warning Center, please ask for the State Water
Resources Control Board – Division of Drinking Water Duty Officer.

NOTIFICATION PLAN

NOTIFICATION PLAN

☐ **STANDARD PLAN:** Please check if you agree to notify customers by door-to-door contact or written handout sheets. It is important that the people going door-to-door are coordinated and trained so they distribute copies to the designated areas of the water system. Maps of the specific areas that the notices are to be distributed should be provided to the customers.

☐ **ALTERNATE PLAN:** Please check if you propose to use another method, and attach the alternate plan to this form.

Report prepared by: _____

Signature and Title _____

Date _____

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

265 West Bullard Avenue, Suite 101, Fresno, CA 93704 | www.waterboards.ca.gov

Guidance for Preparation of the Emergency Notification Plan

Good planning means having a thought out process that has sufficient detail so it can be implemented as quickly as possible. Also, contact with your local county health department, which regulates commercial food service providers (restaurants), and possibly the Food and Drug Branch of the California Department of Public Health, which regulates food processors, will need to be made. Templates (fill in the blank) for the public notices and instructions can be obtained from our Department's website at

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/notices.shtml

We recommend that the following items be addressed in your plan:

- The names, titles, and phone numbers of the water system personnel who are responsible and authorized to implement the plan. A suggestion would be to include board members and civic organizations that may be available to assist.
- The names and phone number of newspapers, radio stations, TV stations, internet and other electronic media. Also, smaller and transient water systems may be able to use community bulletin boards and the post office.
- If a door-to-door method is used, the plan must specify who and how the notification will be carried out. It is important that the people going door-to-door are coordinated and trained so they distribute copies to the designated areas of the water system. Maps of the specific areas that the notices are to be distributed should be provided to the customers.
- Expect to receive follow-up phone calls and anticipate the questions that will be asked and have written responses for the persons answering the calls so consistent information is given. The persons answering the phones should *not* downplay the importance of the notification.
- Key facilities such as schools, hospitals, health/treatment centers, day care centers, convalescence homes, etc., should be directly notified by phone and/or hand notifications. Apartment and business owners/managers will need to be given sufficient copies and asked to distribute it to their tenants and employees. Your plan should list these facilities along with their contact information.

SAMPLE PLAN ONLY
(Use only the text that applies to your water system)

During regular working hours our people will contact the news media at television station KXYZ to broadcast the necessary warning. The local radio stations will also be contacted. The television and radio personnel are available at all hours. As a follow-up measure, we will also contact the Daily Bee, a local newspaper that serves both Ourtown and Hometown.

The warnings will be issued in both English and Spanish to cover all members of the community. Outlying areas of the water service area (such as Isolated Canyon and Lonesome Mountain subdivisions) will also be notified by sound truck and/or handbill distributed to their respective areas. Both of these areas are very small and this can be done quite quickly.

A special telephone answering service can also be quickly set up at the utility headquarters (using the regular company numbers) to answer questions that will come in from consumers. Questions are anticipated, especially from the Hometown area, because that area is served by three different water companies. A map will be available to the telephone answering personnel to determine the water company serving the caller.

It is anticipated that the time for notification to the television and radio audiences will be very short. The areas served by handbill and sound truck will also be notified within an hour. For notification to be issued in other than normal hours, the same media will be contacted and an announcement will be scheduled for as long as is necessary. A sound truck(s) will be used in the early morning hours to quickly alert the people not listening to their radio or television.

ATTACHMENT E:

Bacteriological Sample Siting Plan

**ATTACHMENT B (see p. 6 of instructions)
BACTERIOLOGICAL SAMPLE SITING PLAN**

System No.: 2400220		System Name: Stevinson Ranch Maintenance Yard / The Grove	
PWS Classification: TNC		No. Monthly Users: 25/day	Daily Users: 25/day
No. Active Service Connections: 2		Sampling Frequency: 1/ATR	
Source Sampling Frequency: none		Continuous Water Treatment: none	
Name of Trained Sampler:		Analyzing Lab:	
Person responsible to report coliform-positive samples to DHS: Sean Kelley			
Signature of Water System Representative:		Day/Evening Phone No.: 209-634-4908	
		Date: 209-526-8252	

Sample ID	Sample Type	Sample Point	Location of Sample Point	Address of Sample Point	Months Sample Collection at this Location
1-ROU	Routine	HB	outside HB	Site 1B - Club House	Mar, June, Sept, Dec
1-REP1	Repeat	HB	outside HB	Site 1A - Pavilion	Repeat Sample Only
1-REP2	Repeat	HB	outside HB	Site 1C - Tent Maintenance	Repeat Sample Only
1-REP3	Repeat	WH	WH	Well No. 1	Repeat Sample Only
2-ROU	Routine	HB	HB	Site 1A - Pavilion	Following TC ⁺ only
2-REP1	Repeat	HB	HB	Site 1B - Club House	Repeat Sample Only
2-REP2	Repeat	HB	HB	Site 1D - Maintenance Shop	Repeat Sample Only
2-REP3	Repeat	WH	WH	Well No. 1	Repeat Sample Only
3-ROU	Routine	HB	HB	Site 1C - Tent Maintenance	Following TC ⁺ only
3-REP1	Repeat	HB	HB	Site 1B - Club House	Repeat Sample Only
3-REP2	Repeat	HB	HB	Site 1D - Maintenance Shop	Repeat Sample Only
3-REP3	Repeat	WH	WH	Well No. 1	Repeat Sample Only
4-ROU	Routine	HB	HB	Site 1D - Maintenance Shop	Following TC ⁺ only
4-REP1	Repeat	HB	HB	Site 1B - Club House	Repeat Sample Only
4-REP2	Repeat	HB	HB	Site 1E - Restaurant Bathroom	Repeat Sample Only
4-REP3	Repeat	WH	WH	Well No. 1	Repeat Sample Only
5-ROU	Routine	Sink	sink	Site 1E - Restaurant Bathroom	Following TC ⁺ only
5-REP1	Repeat	HB	HB	Site 1D - Maintenance Shop	Repeat Sample Only
5-REP2	Repeat	HB	HB	Site 1B - Club House	Repeat Sample Only
5-REP3	Repeat	WH	WH	Well No. 1	Repeat Sample Only

If the water system has one or more total coliform-positive samples, at least five routine samples will be collected the following month.

ATTACHMENT F:

Boil Water Order Template – Tier 1 Public Notice

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

DRINKING WATER WARNING

[System] water is contaminated with [fecal coliform or *E. coli*]

BOIL YOUR WATER BEFORE USING

[Fecal coliform or *E. coli*] bacteria were found in the water supply on [date]. These bacteria can make you sick, and are a particular concern for people with weakened immune systems.

What should I do?

- **DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a boil, let it boil for one minute, and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth, washing dishes, and food preparation **until further notice**. Boiling kills bacteria and other organisms in the water.
- *Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems. The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.*
- People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking water Hotline at 1(800) 426-4791.

What happened? What is being done?

Bacterial contamination can occur when increased run-off enters the drinking water source (for example, following heavy rains). It can also happen due to a break in the distribution system (pipes) or a failure in the water treatment process.

[Describe corrective action]. We will inform you when tests show no bacteria and you no longer need to boil your water. We anticipate resolving the problem within [estimated time frame].

For more information, please contact [name of contact] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

Secondary Notification Requirements

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

- **SCHOOLS:** Must notify school employees, students, and parents (if the students are minors).

- RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS (including nursing homes and care facilities): Must notify tenants.
- BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS: Must notify employees of businesses located on the property.

This notice is being sent to you by [system].

State Water System ID#: [number]. Date distributed: [date].

ATTACHMENT G:

Water Quality Monitoring Schedule

WATER QUALITY MONITORING SCHEDULE

Transient Noncommunity System (TNC1)

UPDATED - September 2015

Chemical - Title 22	MCL (mg/L)	Frequency
Primary Inorganics - Section 64432		
Aluminum	1	Not Required
Antimony	0.006	Not Required
Arsenic	0.010	Not Required
Barium	1	Not Required
Beryllium	0.004	Not Required
Cadmium	0.005	Not Required
Chromium (Total Chromium)	0.05	Not Required
Hexavalent Chromium (Chrome 6)	0.010	Not Required
Cyanide	0.15	Not Required
Fluoride	2.0	Once only
Mercury	0.002	Not Required
Nickel	0.1	Not Required
Perchlorate	0.006	Not Required
Selenium	0.05	Not Required
Thallium	0.002	Not Required
Asbestos - Section 64432.2		
Asbestos - Source Water	7 MFL	Not Required
Nitrate/Nitrite - Section 64432.1		
Nitrate (as N)	10	Annually if ≤ 5 mg/L (1)
Nitrite (as nitrogen)	1	Every 3 years if ≤ 0.5 mg/L (2)
Nitrate + Nitrite (sum as nitrogen)	10	N/A
Secondary Standards - Table 64449-A		
Aluminum	0.2	Not Required
Color	15	Not Required
Copper	1.0	Not Required
Foaming Agents	0.5	Not Required
Iron	0.3	Once only
Manganese	0.05	Once only
Methyl-tert-butyl ether (MTBE)	0.005	Not Required
Odor	3	Not Required
Silver	0.1	Not Required
Thiobencarb	0.001	Not Required
Turbidity	5	Not Required
Zinc	5	Not Required
General Minerals - Section 64449		
Bicarbonate	N/A	Once only
Carbonate	N/A	Once only
Hydroxide Alkalinity	N/A	Once only
Calcium	N/A	Once only
Magnesium	N/A	Once only
Sodium	N/A	Once only
Hardness	N/A	Once only
pH	N/A	Once only
Secondary Standards - Table 64449-B		
TDS	500-1000;1500	Not Required
Specific Conductance	900-1600; 2200	Once only
Chloride	250-500;600	Not Required
Sulfate	250-500;600	Not Required

MCL = Maximum Contaminant Level

Contact your district office with any questions.

- (1) Nitrate (as N) replaces Nitrate (as NO₃). Nitrate (as N) sampling shall increase to quarterly following any result ≥ 5 mg/L. Upon request, this may be reduced to an annual frequency after 4 quarters of monitoring. Beginning with Jan. 1, 2016, water systems shall comply with the Nitrate (as N) requirement.
- (2) Nitrite sampling shall be increased to quarterly following any result ≥ 0.5 mg/L. Upon request, this may be reduced to an annual frequency after 4 quarters of monitoring.

DRINKING WATER FIELD OPERATIONS BRANCH

**NOTICE OF CITATION ISSUANCE
PENALTY**

BACKGROUND STATEMENT

The State Water Resources Control Board, Division of Drinking Water, issued **Citation No. 03-11-17C-008** for the **Stevinson Ranch Maintenance Shop/The Grove** (Public Water System No. 2400220).

This Citation carries a penalty of \$1,500.00 (one thousand and five hundred dollars).

METHOD OF PAYMENT

Within 90 days of receipt of this Citation, submit a check in the amount of \$1,500.00 made payable to:

SWRCB – Division of Drinking Water

and mail to:

**SWRCB Accounting Office
ATTN: Drinking Water Program Fees
P.O. Box 1888
Sacramento, CA 95812-1888**

(Please indicate the Citation Number on the Check)

(Attach Check Here)